

REMARKS

By this Amendment, claims 3, 4, 9, 10 and 19 are canceled and claims 1, 6, 8, 12, 14, 15, 18 and 20 are amended. As a result, claims 1, 2, 5-8, 11-18 and 20 are pending. Claim 1 is amended to correct inadvertent typographical errors, to remove unnecessary limitations and to include the patentable limitations of canceled claim 3. Claim 6 is amended to correct inadvertent typographical errors, to remove unnecessary limitations and to depend from amended claim 1. Claim 8 is amended to correct inadvertent typographical errors, to remove unnecessary limitations, to provide proper antecedent basis and to include the patentable limitations of canceled claim 9. Claim 12 is amended to correct inadvertent typographical errors, to remove unnecessary limitations, to provide proper antecedent basis and to depend from amended claim 8. Claim 14 is amended to correct an inadvertent typographical error. Claim 15 is amended to correct inadvertent typographical errors, to provide proper antecedent basis, to remove unnecessary limitations and to include further patentable limitations. Claim 18 is amended to correct inadvertent typographical errors and to include the patentable limitations of canceled claim 19. Claim 20 is amended to depend from claim 18. The amendments to claims 6, 12, 14 and 20 do not narrow the scope of the claims as originally filed. Accordingly, prosecution history estoppel does not arise to bar application of the doctrine of equivalents to the limitations recited in any of claims 2, 5-7, 11-14, 16, 17 and 20.

Pursuant to paragraph 2 of the above-referenced Office Action, Claim 14 is objected to because the limitation "or more or the" should be "or more of the." Applicants have amended the claim limitation to recite "at least one of the" having the same or broader scope. Claim 15 stands objected to because there is insufficient basis for the limitation "the outside pair of terminals." Applicants have amended the claim limitation to recite "the pair of outside wires" having proper antecedent basis and the same or broader scope. The remaining amendments to claim 15 correct inadvertent typographical errors, remove unnecessary limitations and add further patentable limitations, as discussed below.

Pursuant to paragraph 3 of the Office Action, claims 1, 3-5, 8-11, and 13-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. (4,910,770) in view of Russell et al. (5,757,803). The Examiner asserts that Collins et al. discloses a pair of telephone company wires (37b) for carrying the combined signal of the first and second signals and a splitter module (43) having first and second pairs of contacts and designed to pass the combined signal from the first pair of contacts to the second pair of contacts. The Examiner further asserts that Russell et al. discloses a splitter circuit with a first circuit component designed to pass only a POTS signal. Therefore, the Examiner suggests that it would have been obvious to one of ordinary skill at the time the invention was made to modify the NID of Collins et al. by specifically providing a splitter circuit with a circuit component designed to pass only the POTS signal.

Applicants respectfully traverse the rejection. There is no suggestion, motivation or teaching in the prior art to make the combination proposed by the Examiner. Furthermore, the Examiner has impermissibly applied hindsight to arrive at the combination of references asserted to produce the claimed invention. In any event, the combination proposed by the Examiner does not produce the invention as now claimed in independent claims 1, 8, 15 and 18.

Deregulation of the telecommunications industry has required manufacturers of certain telecommunications equipment to provide a demarcation point between the telephone company wiring and the subscriber wiring at the subscriber premises. The demarcation point must be accessible to the subscriber so that fault isolation testing can be accomplished conveniently and easily without the need for tools of any kind. A solution for this requirement is to provide a jack and removable plug at the demarcation point between the telephone company wiring (commonly referred to as the "outside plant wires") and the subscriber wiring (commonly referred to as the "inside wires"). The subscriber can insert the plug from a working piece of telecommunications equipment to determine whether a fault exists in the outside plant wires while the inside wires are disconnected. Accordingly, the demarcation point must permit the subscriber to look outward (i.e., in the direction of the outside plant wiring) while the inside plant wires are disconnected. If the outside plant wiring is found to be working, then the subscriber can

reconnect the inside wiring and test again from an RJ-11 jack inside the residence. If a fault is encountered, then the fault can be assumed to be in the inside wiring, thus effectively looking inward (i.e., in the direction of the inside wiring) and accomplishing fault isolation to the level of the telephone company wiring versus the subscriber wiring.

Collins et al. discloses a Network Interface Device (NID) comprising a module 43 electrically connected in series between the telephone company wiring and the subscriber wiring. A telephone circuit 43a is disposed within the module 43 between the telephone company terminals 37 and the subscriber terminals 35. Collins et al. further discloses that the telephone circuit 43a is selected from various types of circuits, “such as Maintenance Termination Units (MTU’s), Remote Isolation Devices (RID’s), and Half-Ringers.” Column 6, lines 24-26. Contrary to the Examiner’s assertion, Collins et al. *does not* disclose (or suggest) that the telephone company wiring may carry a combined signal comprising a first signal and a second signal, or that telephone circuit 43a may be a splitter module. As is well known, a splitter module separates a combined signal into two or more discrete signals that comprise at least a portion of the combined signal. Collins et al. *does not* disclose (or suggest) that the subscriber terminals 35 may be wired to receive and transmit separate discrete signals to different pairs of inside wires. Accordingly, merely substituting the POTS splitter assembly disclosed by Russell et al. for the telephone circuit 43a of the Collins et al. NID does not operate to produce the claimed invention.

Furthermore, there is no suggestion, motivation or teaching in the prior art to make the combination proposed by the Examiner. “In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the [teachings of the] references and combine them in the way that would produce the claimed invention.” Karsten Manufacturing Corp. v. Cleveland Golf Co., 58 USPQ2d 1286 (Fed. Cir., March 22, 2001) No. 99-1234. In the absence of any such suggestion, motivation, or teaching, it is presumed that the Examiner has utilized the disclosure of the application itself to provide the necessary suggestion, motivation or teaching. The use of Applicants’ own disclosure to fill the gap between the prior

art and the claimed invention is impermissible hindsight, and thus, does not satisfy the Examiner's burden to establish a *prima facie* case of obviousness.

The Alcatel® A1000 ADSL Remote Splitter discussed in the specification at page 3 and cited by Applicants is an example of a splitter module installed within a NID. Applicants make no admission that the Alcatel® Splitter constitutes prior art to the present invention. That splitter module, however, does not permit fault isolation testing of the POTS signal and/or the xDSL signal to be accomplished conveniently and easily without the need for tools of any kind. As illustrated by the wiring schematic on Attachment "A" submitted herewith, the Alcatel® Splitter is electrically connected between the RJ-11 jack on the customer bridge and the inside wiring. Thus, only a fault in the outside plant wires (the combined signal) can be isolated readily without the use of tools. The subscriber cannot look inward to isolate a fault on the first pair of inside wires (the POTS signal) and/or the second pair of inside wires (the xDSL signal) readily without the use of tools. In the combination proposed by the Examiner, the splitter module would be electrically connected between the outside plant wires and the jack 54 on module 43 (see Attachment "A"). However, because only a single jack 54 is disclosed by the combination, the subscriber still cannot look inward to isolate a fault on the first pair of inside wires (the POTS signal) separately from the second pair of inside wires (the xDSL signal), readily without the use of tools. Vice versa, the subscriber still cannot look inward to isolate a fault on the second pair of inside wires readily without the use of tools.

Attachment "A" also illustrates a wiring schematic for Applicants' invention as now claimed. Amended independent claims 1, 8, 15 and 18 require a first jack and a first removable plug and a second jack and a second removable plug. The first jack and the first plug create a first demarcation point for testing the first pair of inside wires. The second jack and the second plug create a second demarcation point for testing the second pair of inside wires. For at least the reasons discussed above, the references cited by the Examiner do not, either alone or in combination, disclose or suggest the claimed invention. Thus, claims 1, 8 and 18, as amended herein, are patentable. Dependent claims 5, 11, 13, 14, 16, and 17 (claims 3, 4, 9 and 10 having been canceled) include all of the limitations of the independent claims 1, 8, 15 and 18 from

which they depend, and thus, are likewise patentable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1, 3-5, 8-11, and 13-18 under 35 U.S.C. § 103(a).

Pursuant to paragraph 4 of the Office Action, claims 2, 6, 12, 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. in view of Russell et al. Claims 2 and 6 depend from patentable base claim 1, and thus, are likewise allowable for at least the same reasons. Claim 12 depends from allowable base claim 8, and thus, is likewise allowable for at least the same reasons. Claim 19 is canceled. Claim 20 depends from allowable base claim 18 and thus, is likewise allowable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 2, 6, 12, 19 and 20 under 35 U.S.C. § 103(a).

Pursuant to paragraph 5 of the Office Action, claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable (i.e., obvious) over Collins et al. in view of Russell et al. and further in view of Butler et al. (5,548,641). Claim 7 depends from patentable base claim 1, and thus, is likewise allowable for at least the same reasons. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 7 under 35 U.S.C. § 103(a).

Pursuant to paragraph 6 of the Office Action, claims 1-20 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent 6,137,866 in view of well known prior art. The Examiner asserts that although the conflicting claims are not identical, they are not patentably distinct from each other because subject matter claimed in the present application is drawn to the concept of splitting a combined signal from a telephone company. Applicants respectfully traverse the rejection. The pending claims of the present invention are patentably distinct from claims 1-29 of the '866 patent. In particular, the claims of the '866 patent are directed to a splitter assembly adapted for mounting or use *within the premises*. As such, the indoor splitter assembly cannot be utilized for fault isolation testing of the POTS signal on the first pair of inside wires and/or the xDSL signal on the second pair of inside wires. Thus, the indoor splitter assembly does not disclose or claim

the first demarcation point comprising a first jack and a first plug, or a second demarcation point comprising a second jack and a second plug. For at least the reasons discussed above, the addition of the first demarcation point and the second demarcation point to the invention claimed in the '866 patent would not have been obvious. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 1-20 under the judicially created doctrine of obviousness-type double patenting. In the alternative, Applicants agree to file a terminal disclaimer disclaiming the term of the patent for the present invention beyond the expiration of the term of the '866 patent in the event that a satisfactory Notice of Allowability is received.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Once Amended) A splitter module for mounting in a Network Interface Device (NID) for providing a demarcation point between a pair of outside plant wires and a first and a second pair of [subscriber] inside wires, the first pair of inside wires for carrying a first signal, the second pair of inside wires for carrying a second signal and the pair of outside wires for carrying a combined signal of the first and the second signals, the NID having a housing defining an accessible interior and having a mounting surface therein defining a plurality of [module] mounting locations, the splitter module comprising:
 - (j) a block having a mounting footprint configured for removable attachment to at least one of the mounting [location] locations;
 - (k) an outside plant pair of terminals located on the block and configured for having the pair of outside plant wires connected thereto;
 - (l) a splitter circuit housed in the block with a first pair of contacts electrically connected to the outside plant pair of terminals and a second pair of contacts, a first circuit component of the circuit electrically between the first and the second pair of contacts and designed to pass only the first signal from the first pair of contacts to the second pair of contacts;
 - (m) a first jack located on the block and electrically connected to the second pair of contacts;
 - (n) a first plug removably located in the first jack to provide a [subscriber test] first demarcation point for the first signal [upon removal of the plug from the jack];
 - (o) a first inside pair of terminals located on the block, electrically connected to the second pair of contacts through the [subscriber test] first demarcation point and configured for having the first pair of inside wires connected thereto; [and]
 - (p) a second inside pair of terminals located on the block, electrically connected to the outside plant pair of terminals so as to receive at least the second signal and configured for having the second pair of inside wires connected thereto;
 - (q) a second jack located on the block and electrically connected in series between the outside plant pair of terminals and the second inside pair of terminals; and
 - (r) a second plug removably located in the second jack to provide a second demarcation point for the second signal.

6. (Once Amended) The module of Claim [5] 1 further comprising a combined signal jack [and combined signal plug removably inserted therein] located electrically in series between the outside plant pair of terminals and the first pair of contacts to provide a [test] third demarcation point for the combined signal.

8. (Once Amended) A splitter module for mounting in a Network Interface Device (NID) for providing a demarcation point between a pair of outside plant wires and a first and a second pair of [subscriber] inside wires, the first pair of inside wires for carrying a first signal, the second pair of inside wires for carrying a second signal and the pair of outside wires for carrying a combined signal of the first and the second signals, the NID having a housing defining an accessible interior, the splitter module comprising:

- (a) a block of a size suitable for placement in the interior of the NID;
- (b) a splitter circuit housed in the block with a first pair of contacts for electrical connection to the pair of outside plant wires and a second pair of contacts, a first circuit component of the circuit electrically between the first and the second pair of contacts and designed to pass only the first signal from the first pair of contacts to the second pair of contacts;
- (c) a first inside pair of terminals located on the block electrically connected to the second pair of contacts and configured for having the first pair of inside wires connected thereto; [and]
- (d) a second inside pair of terminals located on the block, electrically connected to the [outside pair of terminals] pair of outside plant wires so as to receive at least the second signal and configured for having the second pair of inside wires connected thereto; [and]
- (e) a POTS jack connected to the block and [capable of receiving] configured to receive a first plug [from a standard telephone], the POTS jack electrically connectable to the second pair of contacts [to allow] for testing [of] the first signal [by the subscriber] by inserting [a telephone] the first plug [from a telephone] into the POTS jack when the POTS jack is electrically connected to the second pair of contacts; and
- (f) a second jack connected to the block and configured to receive a second plug, the second jack electrically connectable in series between the first pair of contacts and the second inside pair

of terminals for testing the second signal by inserting the second plug into the second jack when the second jack is electrically connected to the second inside pair of terminals.

12. (Once Amended) The module of Claim [11] 8 further comprising a combined signal jack [and combined signal plug removably inserted therein] located electrically in series between the [outside plant pair of terminals] pair of outside plant wires and the first pair of contacts [to provide a test point] for testing the combined signal.

24. (Once Amended) The module of Claim 8 wherein the NID has a plurality of mounting locations and the block defines a mounting footprint that is removably attachable to [one or more or] at least one of the mounting locations.

15. (Once Amended) An xDSL splitter assembly, comprising

(a) a network interface device (NID) for providing a demarcation point between a pair of outside plant wires and a first and a second pair of [subscriber] inside wires, the first pair of inside wires for carrying a POTS signal, the second pair of inside wires for carrying an xDSL signal and the pair of outside plant wires for carrying a combined POTS and xDSL signal, the NID having a housing defining an interior with a plurality [if] of [identical] mounting locations [for modules]; and

(b) a splitter module comprising:

(v) a block with a mounting footprint to be received in [one or more] at least one of the mounting locations;

(vi) an xDSL splitter circuit housed in the block with a first pair of contacts for electrical connection to the pair of outside plant wires and a second pair of contacts, a first circuit component of the circuit electrically between the first and the second pair of contacts and designed to pass only POTS signals from the first pair of contacts to the second pair of contacts;

(vii) a first inside pair of terminals located on the block electrically connected to the second pair of contacts and configured for having the first pair of inside wires connected thereto; [and]

(viii) a second inside pair of terminals located on the block electrically connected to the

[outside pair of terminals] pair of outside plant wires so as to receive at least the xDSL signal and configured for having the second pair of inside wires connected thereto; [and]

(v) a POTS jack connected to the block and [capable of receiving] configured to receive a first plug [from a standard telephone], the POTS jack electrically connectable to the second pair of contacts [to allow] for testing [of] the POTS signal [by the subscriber] by inserting [a telephone] the first plug [from a telephone] into the POTS jack when the POTS jack is electrically connected to the second pair of contacts; and

(vi) an xDSL jack connected to the block and configured to receive a second plug, the xDSL jack electrically connectable in series between the first pair of contacts and the second inside pair of terminals for testing the xDSL signal by inserting the second plug into the xDSL jack when the xDSL jack is electrically connected to the second inside pair of terminals.

18. (Once Amended) A splitter module for selectively passing a first signal from a combined signal having the first signal together with a second signal, the splitter module comprising:

(d) a housing;

(e) a first pair of terminals located on the housing;

(f) an RJ-11 jack located on the housing and an RJ-11 plug removably inserted in the RJ-11 jack to create a first demarcation point; [and]

(d) a first splitter circuit located in the housing and electrically in series between the first pair of terminals and the RJ-11 jack, the first splitter circuit designed to pass only the first signal to the RJ-11 jack when the combined signal is transmitted through the first pair of terminals to the first splitter circuit; and

(e) an RJ-45 jack located on the housing and an RJ-45 plug removably inserted in the RJ-45 jack to create a second demarcation point, the RJ-45 jack electrically connected to a point between the first pair of terminals and the first splitter circuit.

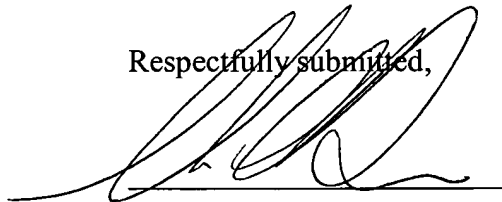
20. (Once Amended) The splitter module of Claim [19] 18 further comprising a second splitter circuit located in the housing and electrically in series between the point and the RJ-45 jack, the second splitter circuit designed to pass only the second signal to the RJ-45 jack when the combined signal is transmitted through the first pair of terminals to the second splitter circuit.

CONCLUSION

In view of the foregoing amendments and remarks, reconsideration of this application is respectfully requested. This Amendment being fully responsive to the Office Action, Applicants submit that the application is now in condition for immediate allowance and solicit such favorable action on the part of the Examiner. The Examiner is encouraged to contact the undersigned directly to further the prosecution of any remaining issues, and thereby expedite allowance of the application.

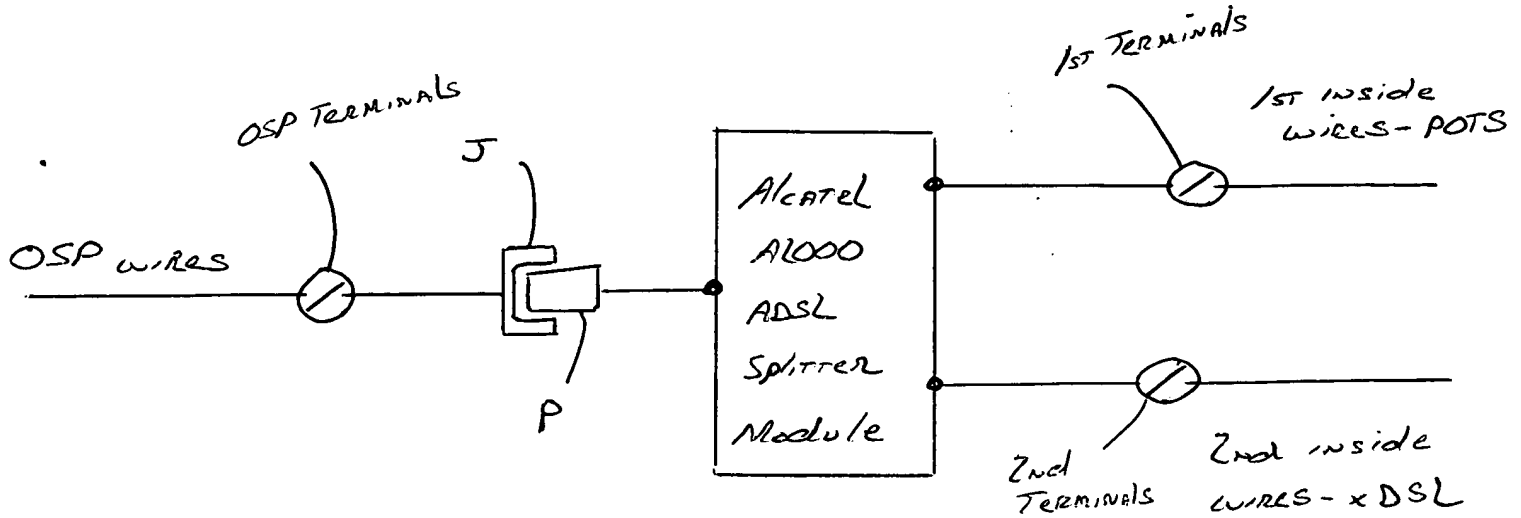
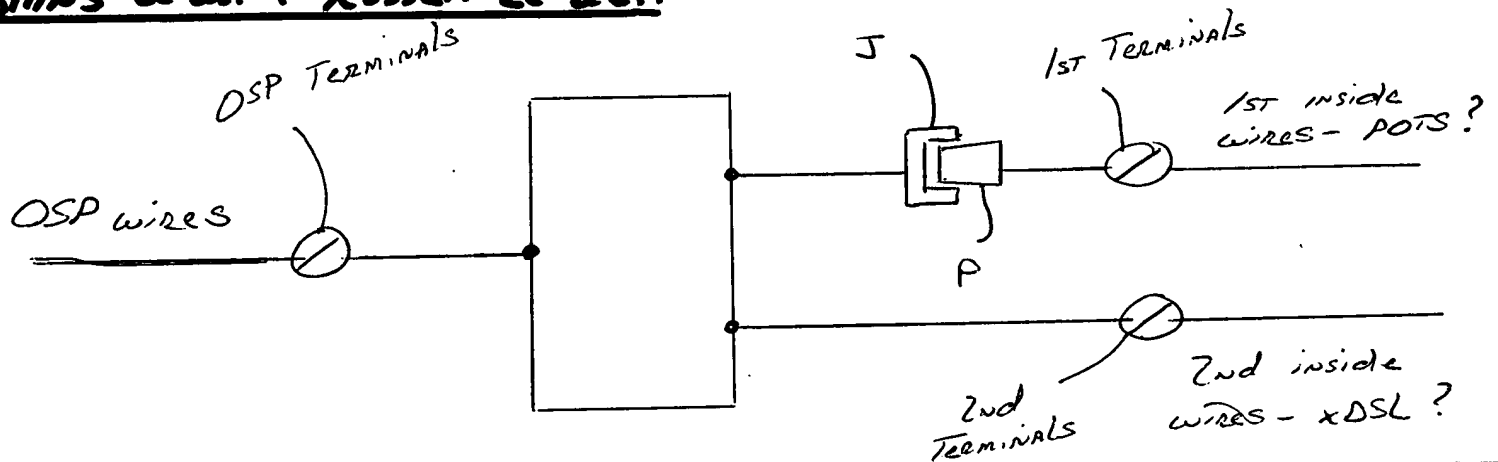
This Amendment does not result in excess independent or total claims. Accordingly, no fee for excess claims is due. If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 19-2167. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not already accounted for, such an extension is requested and the fee should also be charged to Deposit Account No. 19-2167.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'C. Dremann', is written over a horizontal line.

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Alcatel A1000:Collins et al. + Russell et al.:Applicants: